

# ARCHITECTURE

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## SCHOOL OF ARCHITECTURE COLUMBIA UNIVERSITY

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## PROFESSIONAL COMMENT.

FOLLOWING the recent action of the Annual Convention of the American Institute of Architects, the New York Chapter has amended its by-laws in a manner perfectly consistent with the spirit and intent of the change made by the national body. Hereafter the membership of the Chapter will consist of four classes, namely: institute, chapter, honorary and corresponding members. As the name implies, institute members will consist of those who are members of the national body, and chapter members, those who are members of the chapter alone. This classification seems to solve this much talked of matter satisfactorily and honestly, so that none of the confusion that has existed in the past is apt to arise in the future.

AT the last meeting of the New York Chapter a considerable number of members took part in an animated discussion in relation to competitions in general and open ones in particular. The main point at issue was whether the Chapter should recommend to the Committee of the Institute now having the matter in charge the recognition of the open competition. When the evening was over, and nearly everyone had expressed his opinion, nothing was done, some members believing that the open competition had so many evils that it should not be recognized at all, and others contending that it was a necessary evil and that attempts should be made to regulate it. However much the profession may object to the open competition, we believe that it should be recognized, as it is here, and here to stay. As long as men can be found who will compete under such arrangements, so long will the promoters be found who will ask these men to compete. Open competitions are frequently the only course left open to the public official, as every taxpayer rightfully feels that he should have a fair opportunity to secure a public commission with any other man, provided he proves his capabilities. It is true that such competitions are rarely well managed, but certainly little criticism can be launched against such a program as is now being used for the selection of the architect for the New York State Educational Building, where the first competition is absolutely open, and the second competition is invited from the list of the ten winners of the first. It is all very well for the older men to recommend to the younger members of the profession that they should be content with the designing of smaller things, in which, if they show extraordinary ability, they will find full recognition. But we all know that in this day of keen economic competition it is a rare case where a man with few friends and little influence, however large his ability, can secure an opportunity for an important commission except through these very open competitions, even with their many objectionable features.

WHILE the Institute of Architects is hesitating as to the attitude it should assume in open competitions, it is evident from a recent circular issued by the National Sculpture Society that this most representative body of sculptors in the United States unqualifiedly approve of this method of selection. Under date of February 1, the Sculpture Society has issued a program for a small monument to be erected to the poet Schiller in the City of Rochester. The competition is open to all sculptors in the United States, and the designs are to be submitted anonymously. Contrary



to the best accepted methods in such cases, the jury is not mentioned. The promise that the verdict will be given within one week from the receipt of the designs is a step in the right direction.

THE twenty-second annual exhibition of the Architectural League was principally noticeable by reason of its scholastic character. To a greater extent than has been the case in any previous year the exhibition was largely composed of school work rather than representations of the current work in American architecture. The place of honor in the Vanderbilt Gallery was, strangely, given to a number of drawings from France, many of which had little interest except in a purely academic sense. The more humble problems with which the average practitioner has to deal were almost totally ignored, and a considerable part of the wall space in some of the smaller galleries given up to photographs of hackneyed subjects which, however beautiful in themselves, might be found in almost any standard work of architectural reference. In this exhibition the arts and crafts had no abiding place, and a little gallery on the east side, in former years devoted to artistic metal and the like, was far less interesting than has usually been the case. The standard of draftsmanship throughout the exhibition was noticeably high, for, no matter what our opinion may be as to the influence of our Beaux-Arts friends on modern design, there can be no question as to the fact that they are training a corps of younger draftsmen who are as far ahead of the men of the present generation as we were of those who preceded us. We have seldom seen more beautiful draftsmanship than was displayed in the dozen or so drawings by Mr. Birch Burdett

Long, illustrating the work of the late Stanford White, and the drawings for the Paris prize were marvels of dexterous draftsmanship. On the occasion of the annual dinner the gold medal of the Institute was awarded to Messrs. McKim, Mead & White for Dr. Parkhurst's church, and at the same time a presentation was made to Messrs. Carrere & Hastings for the Guggenheim house, exhibited in 1906.

ALL lovers of numismatics will rejoice in the fact that Uncle Samuel has engaged Mr. Augustus Saint Gaudens to prepare models for the new gold coinage of the United States. Few men, either in this country or in Europe, are better qualified for the work, and with Mr. Saint Gaudens as the sculptor and our energetic President

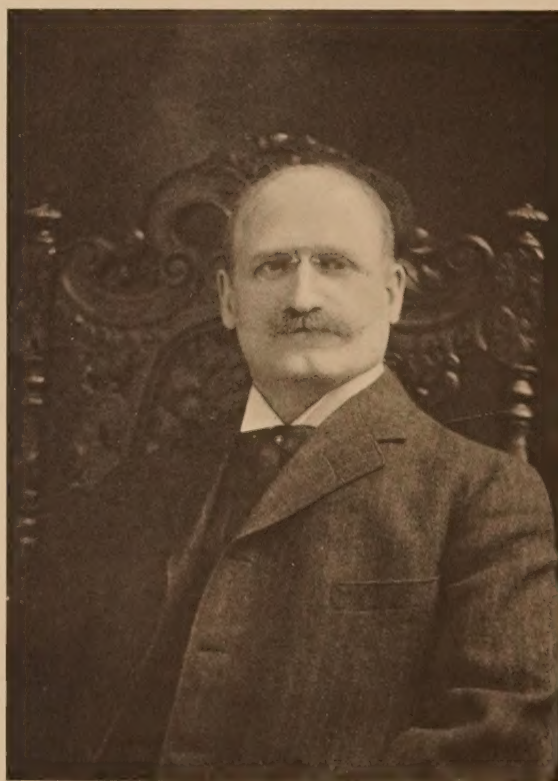
as the critic, results should be obtained equal to the beautiful coinage of the French Republic.

THE repetition of the attempt of last year to amend the Tenement House Act so as to change the definition of a tenement to a building containing more than three families is being made at this session of the legislature. The bill is being opposed by the Charity Organization Society, whose influence defeated the bill last year, as they claim that it would remove from the jurisdiction of the Tenement House Department some 22,000 existing three-family houses. It would also stop the cutting of windows into dark interior rooms, and even the removing of school sinks and providing of proper fire-escapes, which would now have to be provided under the present classification. Further

amendments to the law are being proposed by the Tenement House Commissioner himself, with the assistance of the Corporation Counsel. Just at this writing we have not been able to inform ourselves of the nature of all these changes, although Commissioner Butler has stated that they are in the direction of simplifications both of the mandate as well as the procedure. There is considerable complaint amongst the architects dealing with the Tenement House Department of the extraordinary length of time required to secure a permit under the provisions of the existing law, as it frequently takes over a month to secure the approval of a set of drawings, and there is consequent loss of time in signing contracts and starting the business of construction.

THE Municipal Art Society of the City of New York has initiated a movement looking towards the formation and maintenance of a municipal museum. A number of

cities throughout Europe now support such a museum, in which are placed all the original designs and models for municipal improvements, which form the permanent exhibit, and in addition, such museums are frequently used for exhibitions of civic betterments. As our municipal affairs are now conducted, the information obtained in the process of obtaining great public works soon becomes lost in the musty records of the city, and very often many of the mistakes committed by commissions having such matters in charge are repeated again and again, on account of their inability to inform themselves of past experiences. The project is still in the formative state, but the Municipal Art Society hopes to awaken public interest in the matter during the coming spring.



Architects of To-Day.

MR. GEORGE KEISTER, NEW YORK.



IT may be interesting to many practitioners to be able to point out to some clients that their continued interference in the relations between the owner and contractor sometimes brings disaster upon themselves. In a recent suit fought out in the New York Supreme Court for the enforcement of a mechanic's lien, the contractor, while admitting that the extra work claimed had not been ordered by the architect, under the terms of the contract, did claim that the owner was on the work every day, frequently two or three times, that he frequently gave directions, and that he many times gave direct orders. The evidence that the owner had given these orders within the terms of the contract was decidedly vague, but the court decided that the owner was at least liable for those charges outside of the contract. The contractor evidently realized this position, and predicated his actions upon the owner's lack of knowledge of the terms of the building contract, he readily acquiesced in anything the owner asked him to do, and when the work was finished put in a bill for all of these changes as "extras," and collected it.

WE are glad to see that one of the principal speakers at the General Convention of the National Association of Cement Users approached his subject upon æsthetic lines. Whether the architect likes it or not, the concrete block is here to stay, and it is therefore with considerable gratification that we note that Mr. A. O. Elzner treated the subject of concrete block architecture from other than purely utilitarian reasons. Mr. Elzner very properly stated that "At present the tendency in the manufacture of these blocks is to imitate split faces of stone ashler. This is radically wrong in principle, and should not be tolerated. A flat, smooth surface will always look well. However, if a pitched or split face is desired, let it be produced by casting the block flat and then pitching off the face with a chisel and hammer, just as is done with stone. The clean fracture of concrete thus exposed will be eminently artistic and effective, and will have all the merit that belongs to truthfulness. Plain concrete ashler walls might in some cases be effectively relieved by the introduction of bands of decorated blocks with some simple ornament molded in the face, very much as is done with terra cotta, but by all means avoid the molded rock-faced work. It is artistically bad." It has always seemed to us that the use of concrete in block form is in itself illogical. It is distinctly a monolithic material, but whatever our opinion may be, the concrete block, like the open competition, is here, and here to stay, and it is the architect's duty to attempt to get the best possible results out of it, and to use his influence with the manufacturer to make a substance which looks firm and unyielding, rather than as if it were made of putty.

THE Gargoyles have arranged to hold all meetings for the year 1907 at the Hofbrau Haus at Broadway and 30th Street. This society is incorporated under the laws of the State of New York, and its membership is formed of architects, draftsmen, sculptors, artists, designers, engineers, and others of the allied arts. The officers elected at the last annual meeting for the ensuing year are: Henry C. Van Cleef, President; Ed. H. Rosengarten, Vice President; W. F. Anderson, Corresponding Secretary; A. M. Hedley, Recording Secretary; W. J. Blackburn, Treasurer; W. T. L. Armstrong, Chairman of Current Work Com-

mittee; Ed. L. Howell, Chairman of Entertainment Committee; C. F. Winkelman, Chairman of Job Committee.

#### THE RICHMOND CATHEDRAL.

THE Cathedral at Richmond, with its accessories, occupies an entire square fronting on Monroe Park. The plot is irregular. The Diocesan Houses are built on the rear end of the plot. It was the original intention to build one large house as the Residence of the Bishop, with accommodations for the Vicar-general of the Diocese, the Rector of the Cathedral and the assistant Priests, but it was finally decided to erect two separate buildings.

The Cathedral is a domed and porticoed structure in the Italian Renaissance style. The basement is of Virginia Granite, the superstructure of Indiana Limestone, with the roof of copper and unglazed green tile. The extreme length is 206 feet, the extreme width is 114 feet, and the height to top of cross on dome is 144 feet from the ground. Seating is provided for 1,150 persons. On plan, the Church is in the form of a Latin Cross. The Episcopal Residence and the Rectory and the Church are connected by cloisters, thus inclosing a large garden.

The original sketches were prepared in the Summer of 1901 by the Architect, Mr. Jos. H. McGuire, and the building was dedicated November 29, 1906.

All of the Bronze work such as Altar Rail Gates, Baptismal Font, Candlesticks, Crucifix, Sanctuary Lamp, etc., was furnished by Benziger Brothers. It is of a high quality and is finished in the celebrated Barbedienne finish.

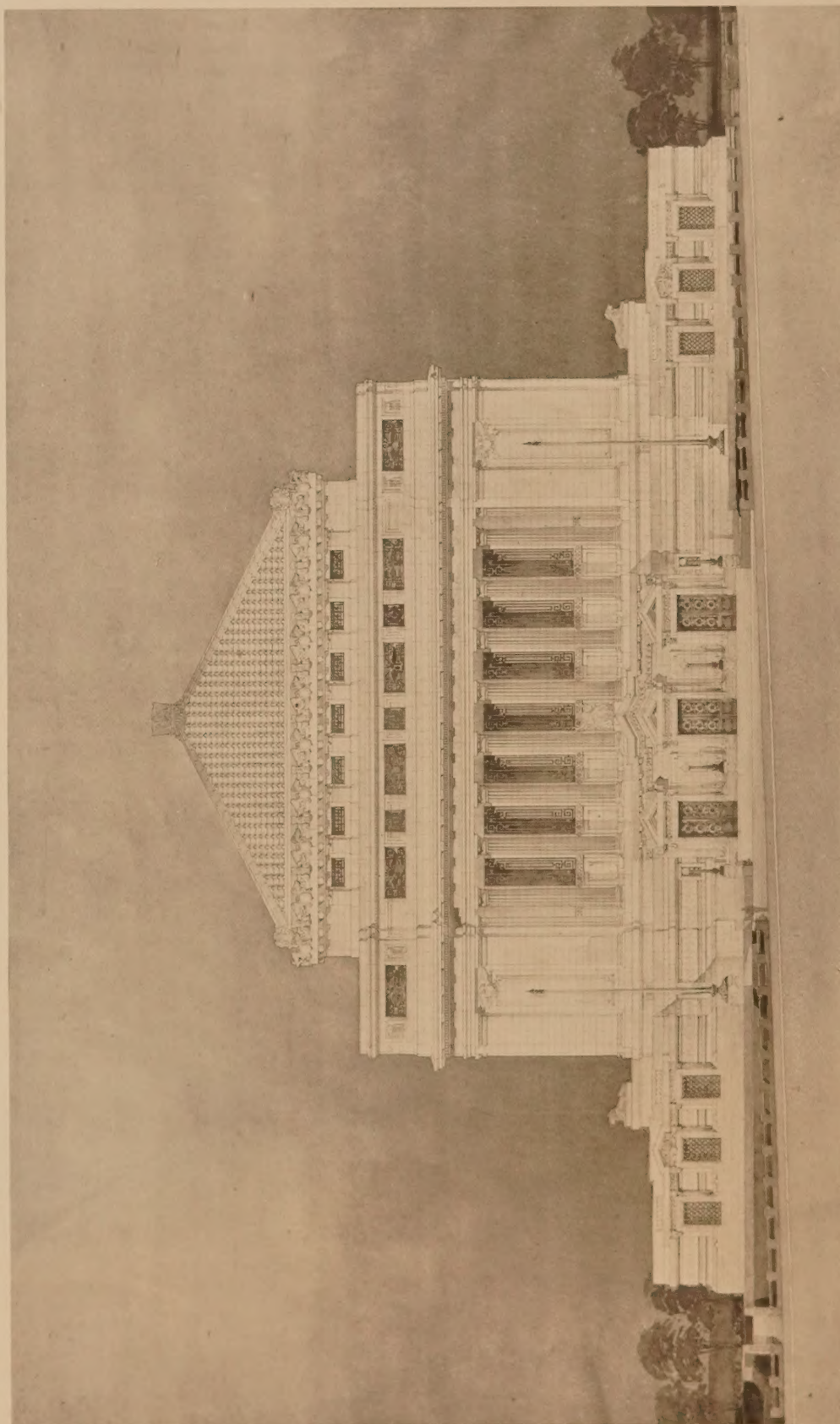
#### AIR CLEANSING.

IN the present light of demands for perfect sanitation and approved hygiene the architect's attention has been brought forcibly during the last few years to the great advantages derived from cleansing air supplied to buildings through ventilation systems. While formerly such installations were made more as curiosities or where an architect wanted to see what he could do, it has become the custom rather than the exception to provide some means for removing the solid matter held in suspension in the air entering large public or office buildings and fine residences. The need for such devices is particularly apparent where the fan system of heating and ventilating is used and where the air secured by the intake is liable to be laden with smoke or street dust. Unfortunately even where the smoke regulations are prosecuted vigorously and where the streets are carefully cleaned and sprinkled there is indisputably an amount of dust and objectionable (soluble) gases present which could be profitably removed with suitable means.

A proper percentage of humidity is a striking factor of health and comfort and suggests an economy, when, with reference to humidity tables and "sensible" or actual thermometer temperatures, we discover that if the relative humidity of between 60 and 70 per cent. which is normal to the human body, be maintained within a heated building a great saving in the number of heat units supplied would result. The latter, because a lower (dry bulb) temperature would be necessary to give equal sensible temperature and sense of physical comfort. In addition, the dryness present in an atmosphere which entered the intake with normal humidity at a temperature of, say, zero, and was raised to a temperature

(Continued page 43)

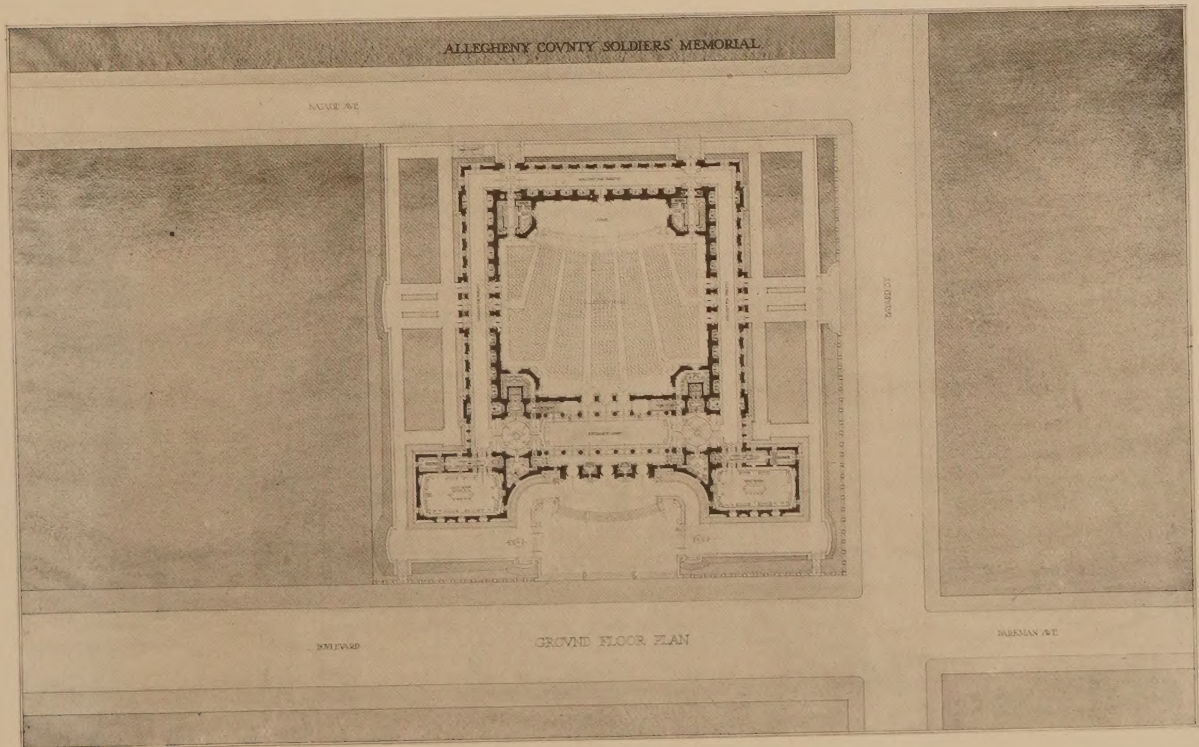
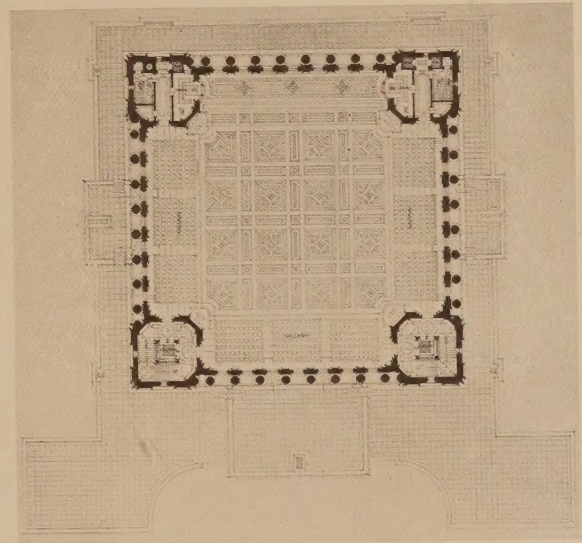
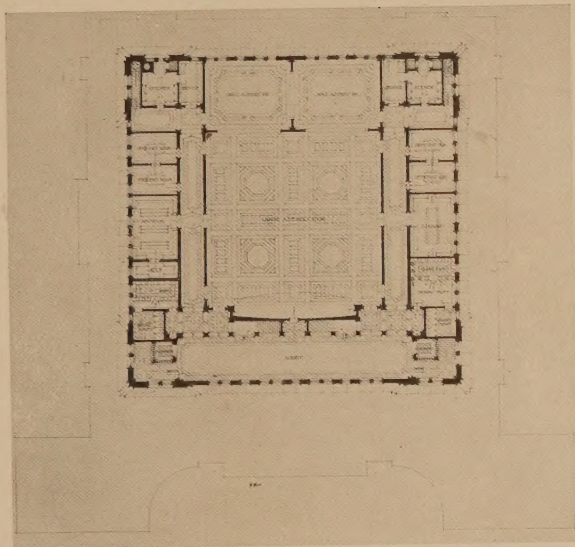




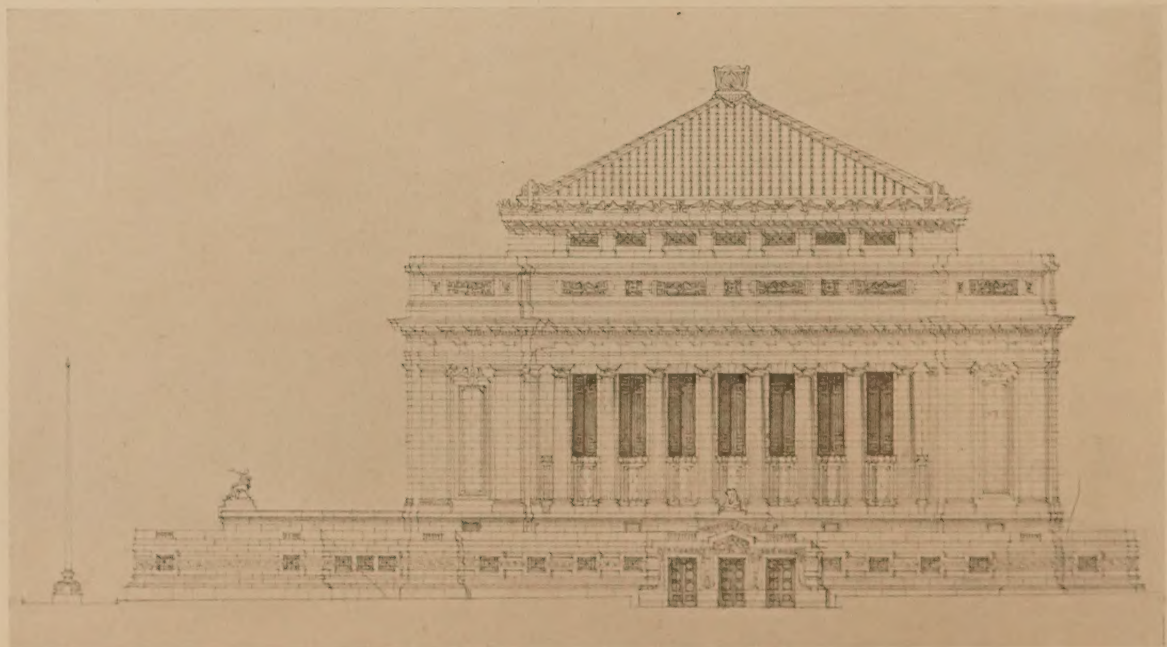
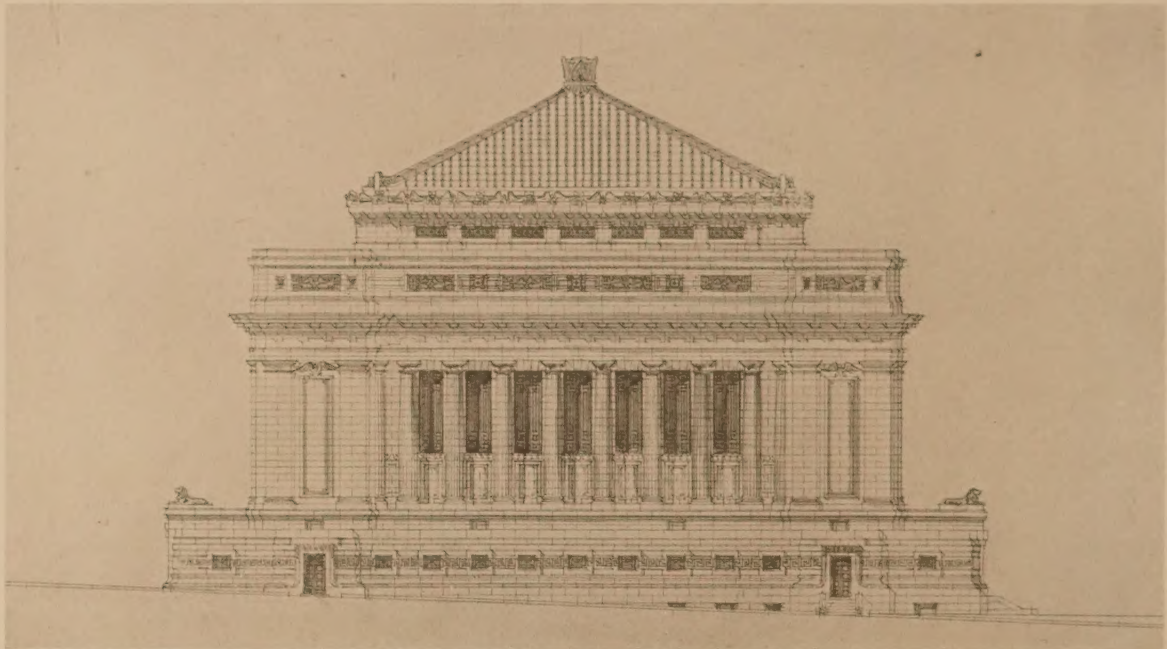
ACCEPTED DESIGN, ALLEGHENY COUNTY SOLDIERS' MEMORIAL, PITTSBURG.

Palmer & Hornbostel, Architects.





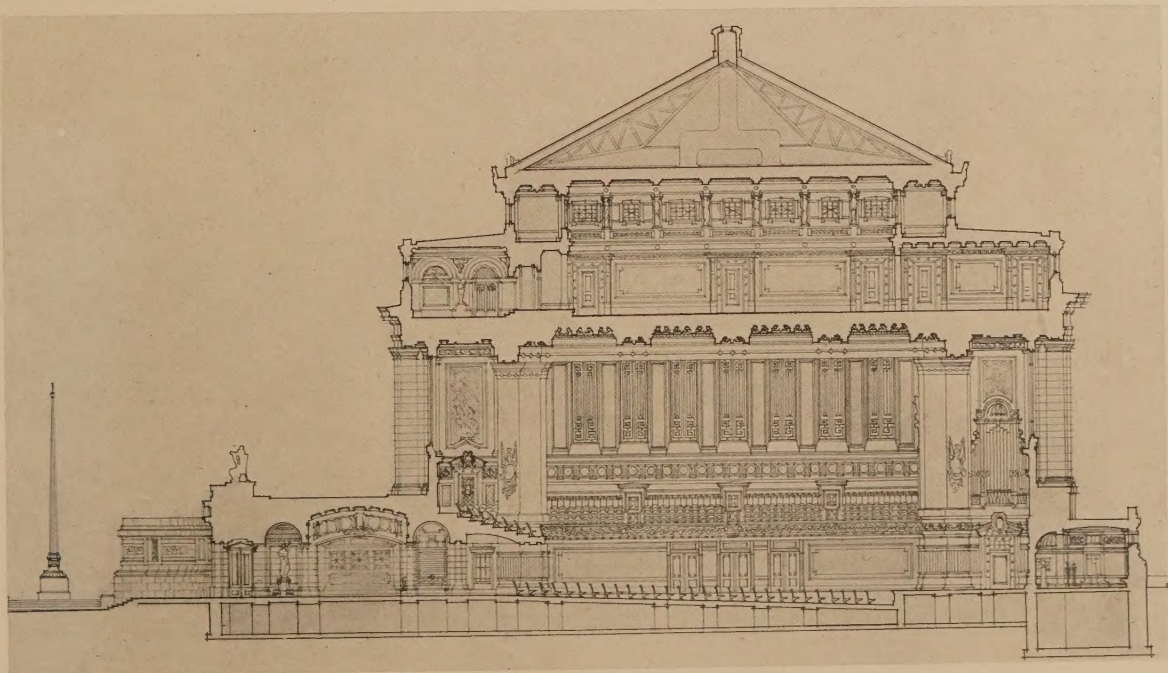
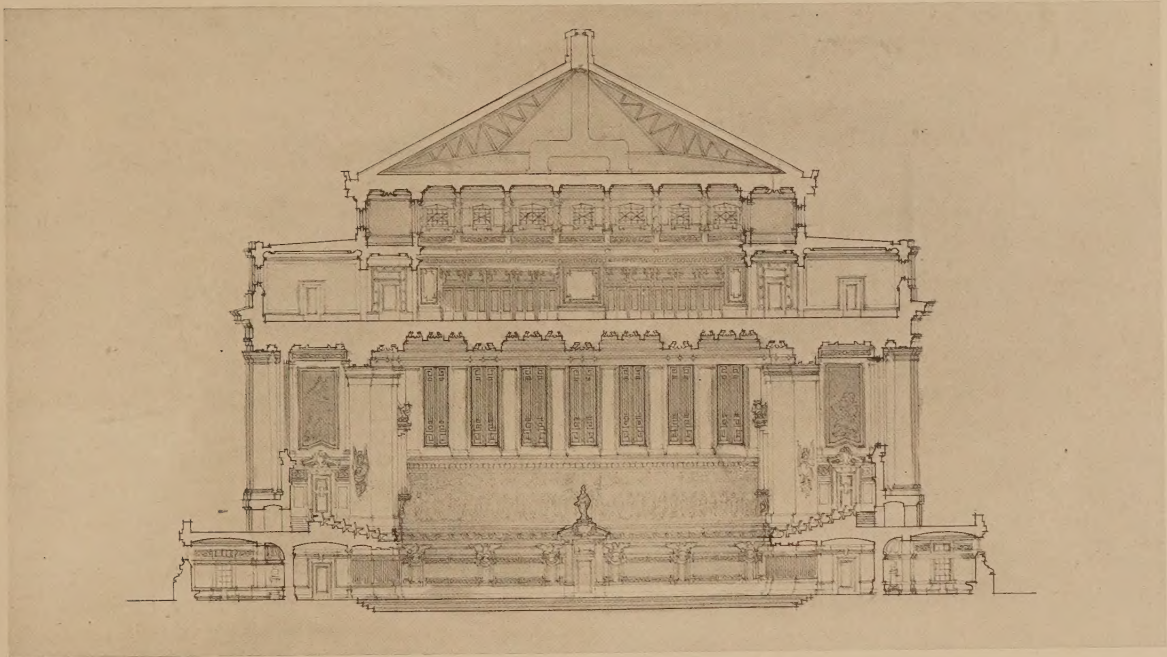




ELEVATIONS, ALLEGHENY COUNTY SOLDIERS' MEMORIAL, PITTSBURG.

Palmer & Hornbostel, Architects.

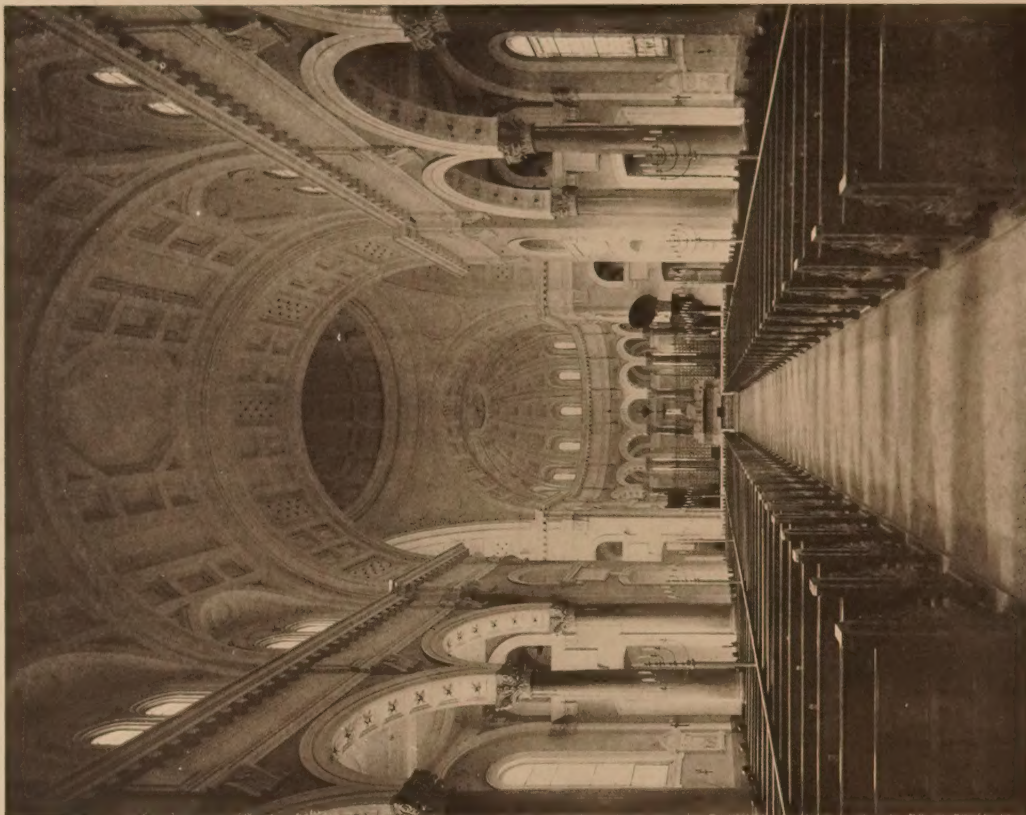




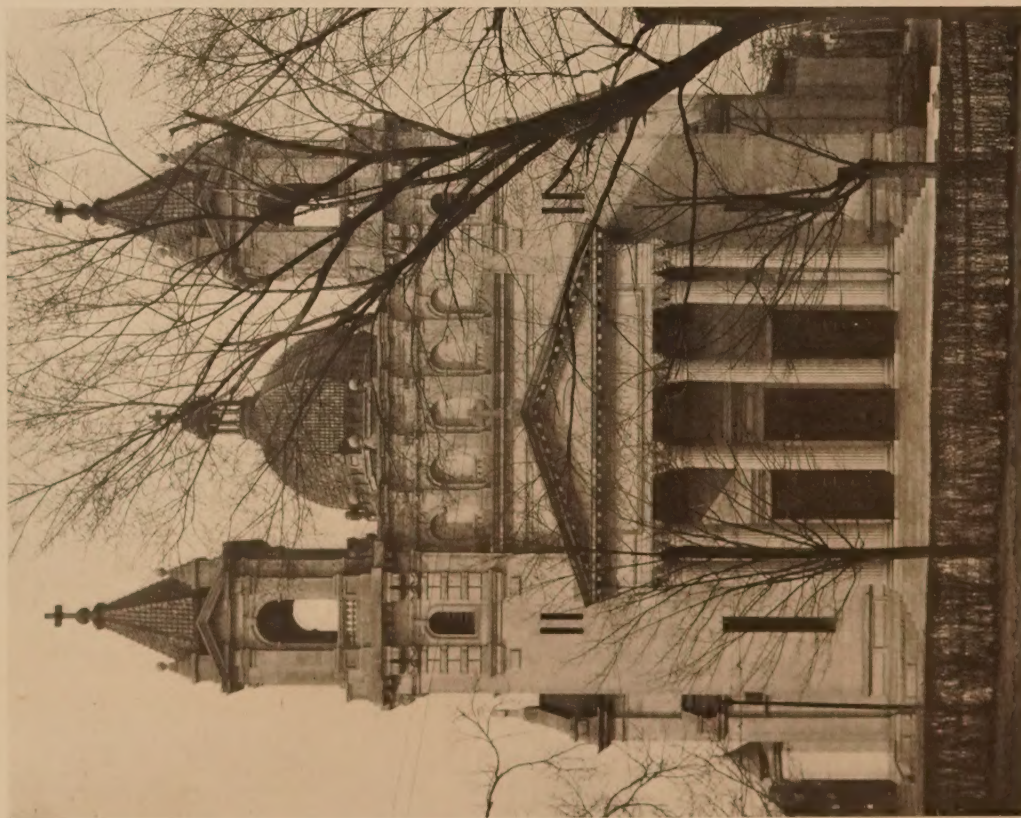
SECTIONS, ALLEGHENY COUNTY SOLDIERS' MEMORIAL, PITTSBURG.

Palmer & Hornbostel, Architects.





Interior.



Front, facing on Monroe Park.

J. H. McGuire, Architect. Wurts Bros. Photo.

CATHEDRAL OF THE SACRED HEART, RICHMOND, VA. ( See plate XXII )





View from Garden looking toward Apse.



View from Cathedral Place, W.

CATHEDRAL OF THE SACRED HEART AND DIOCESAN HOUSES, RICHMOND, VA.

J. H. McGuire, Architect. Wurts Bros, Photo.





TYPICAL FLOOR PLANS, THE SEVERN AND THE VAN DYCK APARTMENTS, SEVENTY-THIRD ST., SEVENTY-SECOND ST. AND AMSTERDAM AVE., NEW YORK. (See plate XX)

Mulliken & Moeller, Architects.



(Continued from page 35)

of 65 or 70° F without an additional supply of moisture to maintain the relative humidity is seriously detrimental to health, causing an excessive evaporation from the membranes of the body, which is productive of catarrhal diseases. Then too—one is more apt to contract a cold when passing from an atmosphere of 15 per cent. relative humidity and 70° thermometer reading into outside zero weather with 70 per cent. humidity than if the normal percentage of moisture had been maintained within the building.

As a review of methods by which desired results have been attempted, the development should be traced through cheese cloth screens on wooden frames, (or filter bags made of similar material) coke screens, (with a trickle of water over them) to burlap screens—some wet—some dry,—some arranged as a moving belt dipping into a water bath—others stationery with a water trickle or spray playing on them and finally to water spray and atomizing washers. The cloth filters occupy too much space due to low air velocity necessary to be applicable to business buildings and are too expensive both in installation and running costs and require too careful attendance for practical and successful operation. As far as is known by the writer, there is no house placing them on the market but architects order them made to dimensions suiting the space available. With such provisions, if humidity control be desired, a separate humidifying equipment must be installed. The coke screens and burlap belts give fair results as far as cleansing is concerned, if the air velocities are kept low—but this requires space and in any event the devices are not automatic nor do they inject into the passing air the necessary amount of moisture to maintain the normal humidity.

The type accomplishing the cleansing through the agency of water sprays are made in standard sizes by several firms who are willing to guarantee results and automatic operation. The advantage of this type is that its apparatus may be readily adapted to occupy otherwise valueless space and that the whole device occupies only between four and ten feet of duct length—depending on conditions and the make of machine chosen. The area of cross section of apparatus depends on the amount of air handled and may be readily figured by allowing an approximate air velocity of 300 to 450 feet per minute.

In one design the air changes direction twice passing each time through a sheet of water from a spray pipe—the path of the air being that of a letter “S”—entering at the top, and leaving at the bottom, whence it passes directly through baffle plates (to take out free water which may be carried along by the air) and then to the heating coils. Here however the friction imposed by abruptly changing the direction of the air travel twice—through 180 degrees within a few feet cannot be recommended. This machine includes regularly no provision for humidity control.

All other machines maintain a straight path for the air from the inlet through the tempering coils, (to prevent water freezing in winter) spray chamber, eliminator or baffle-plates, and heating coils, thus causing a minimum of resistance. The friction loss caused by the interposition of the air cleansing device should not exceed one tenth of an inch of water—which is of course negligible.

The eliminator plates (which are always vertical) in some designs serve a double purpose—primarily to remove free moisture and prevent any spray from being drawn on

into the fan, their construction provides merely a means for “whipping” the air by its own velocity. The farther edge of each baffle or eliminator plate is turned back in the direction of the air velocity—thus providing a vertical gutter to prevent the water film being blown from the edge of the plate. As a secondary function the design of the baffles in at least two makes of air washers present to the passing air a surface covered with a water film to which will adhere every particle of solid matter which has not been wet down in passing through the spray chamber. This extra precaution cannot be overestimated in assuring a perfect cleansing action. It is customary to allow very nearly a quarter pound of atomized water to wash one pound of air or about 1.1 lbs. per 100 cubic feet of air handled.

Humidity control is effected through the agency of a thermostat. This is possible because of the discovery that the amount of moisture that a body of air will absorb during any given length of time in contact with water is more dependent on the temperature of the water than on the temperature of the air. Hence, when the thermostat indicates that the temperature of the air surrounding it is changing, it follows that the absolute humidity must be changed in order to preserve the relative humidity at a constant percentage. The temperature of the spray water is therefore changed by means of a steam jet (acting through a device not unlike an injector) over which the thermostatic motor has control.

Another office which the water spray air cleanser is capable of filling most efficiently is that of cooling the ventilating air in summer. It places the air in direct contact with an immense amount of cooling surface, namely the totaled area of the globule surfaces of the water spray. The amount of cooling effected is a direct function of the difference in temperature between the air and water and also as a minor factor may be mentioned the humidity of the entering air, upon which depends the amount of evaporation which will take place. As an average it should be expected that the air would be cooled about 80 per cent of the initial difference between the water and air, and if it is desired to pump the wash water, which has been used, back to the sprays, ice must be placed in the settling tank or brine coils connected with a refrigerating machine to keep the water temperature down. Experience shows this more effective than blowing the air directly on the coils—by a large percentage in efficiency.

## COMPETITION PROGRAM.

### SUBURBAN DWELLINGS IN CONCRETE.

THE Association of American Portland Cement Manufacturers invites designs for several classes of suburban dwellings, and offers prizes for the successful designs as herein set forth.

All designs will be judged by a Committee consisting of Edgar V. Seeler, Architect, Philadelphia, Pa.; Louis H. Gibson, Architect, Indianapolis, Ind.; Sanford E. Thompson, Civil Engineer, Newton Highlands, Mass; whose awards will be final and binding upon competitors and upon the Association.

Designs are to be for two classes:

Class A—Single or detached dwellings.

Class B—Twin or semi-detached dwellings.

In both classes the use of cement and concrete is desired, wherever practicable. Walls are to be constructed of hollow concrete blocks of plain, paneled or bush-hammered face,





but not of rock-face; or they may be of monolithic construction. If hollow blocks are used, interior plastering will be applied directly to the blocks; if monolithic construction, wall furring will be required. Wooden floor joists and roof timbers may be used; roof coverings may be of cement, tiles, slate or shingles. Concrete block partitions, at least for the lower story, are preferred. Chimneys are to be of concrete blocks or brick; the use of cement for posts, cornices, porch railings and other details of simple design is suggested.

A prime requisite of domestic architecture, whether palace or modest dwellings, is that it should possess beauty, charm and appropriateness. The exterior finish of concrete walls has rarely been handled in a way to produce artistic results. The fault does not lie with the material, as it lends itself to a great variety of textures and colors.

The awards of this competition will be made with regard to, first, excellence in artistic quality; second, convenience of floor arrangements; and third, economy of construction.

In each Class, A and B, designs are desired for dwellings providing the following accommodations:

1. Three or four rooms, 1 or 1 1-2 stories in height, cost not to exceed \$2,000.00.

2. Five or six rooms, 2 stories in height, cost not to exceed \$3,000.00.

3. Seven or eight rooms, 2 or 2 1-2 stories in height, cost not to exceed \$4,500.00.

The number of rooms stated does not in any instance include bathrooms, although bathrooms are desired.

The costs stated do not include the plumbing and heating systems.

In Class B, the sum stated is understood to be one-half the cost of the double or twin house.

A cellar is necessary under part or whole of house.

Each design must show the plans of all stories above the cellar, three elevations and a section—all at the scale of 1-8 inch per foot. The competitor may substitute a perspective and one elevation for the three elevations if he so desires.

Each design must be accompanied by a brief typewritten statement of materials and method of construction proposed, cubic contents and itemized cost based upon local prices of materials and labor. Cubic contents are to be calculated from the bottom of the footings, up through the entire building, and including porches.

Each design is to be drawn or mounted on white card



board or Bristol board, not exceeding 18 in. x 24 in. in size. Designs must not be submitted in mats or under glass. The style of rendering is optional; lettering is to be plain Roman. The name and dimensions of each room, the general outside dimensions of the plan and the heights of stories are to be given, and each sheet may bear the title, "Competition for Suburban Houses in Concrete." The class and subdivision of each design is to be shown by lettering, such as "A 1," "B 2," etc., in the lower left-hand corner.

Drawings are to be enclosed flat, not rolled, and delivered to the Secretary of the Association of American Portland Cement Manufacturers, Land Title Building, Philadelphia, Pa., not later than April 1, 1907, and marked on the outside, "Competition for Suburban Dwellings in Concrete."

As the competition is to be conducted anonymously, no cipher or *nom de plume*, identifying name or mark shall appear on any drawing or wrapper, but each drawing shall be accompanied by a card, bearing the name and address of its author, sealed in a plain opaque envelope and addressed to the Secretary. Any competitor who shall in any way violate the anonymity of the competition will be excluded from all participation in the awards.

Each design and its accompanying envelope containing the name of the author will, when received, be given a number by the Secretary, and the design will be known by this number until after the awards have been determined.

There will be first, second and third prizes for each of the six classes of designs as follows:

A1 and B1, \$100.00, \$60.00 and \$40.00; A2 and B2,

\$150.00, \$100.00 and \$60.00; A3 and B3, \$200.00, \$125.00 and \$90.00.

For each additional design awarded honorable mention, not to exceed six in number, \$25.00; not more than two honorable mentions may be awarded in any one class.

Any competitor may submit as many designs in one or all classes as he may choose, but each design must be wrapped and contain the sealed envelope the same as if submitted by another competitor. The same competitor will not be eligible to receive more than one prize, either first, second or third, in any one class, but he may receive as many honorable mentions as the anonymous judgment of the Committee may award.

All designs receiving prizes or honorable mention shall become the property of the Association of American Portland Cement Manufacturers, which shall have the privilege of publishing them with the designer's name attached. Any designer receiving an award will be allowed to photograph or trace his design.

Designs receiving no award will be returned to their authors by the Secretary of the Association free of expense to the author.

No further information than that contained in this program will be furnished to any applicant.

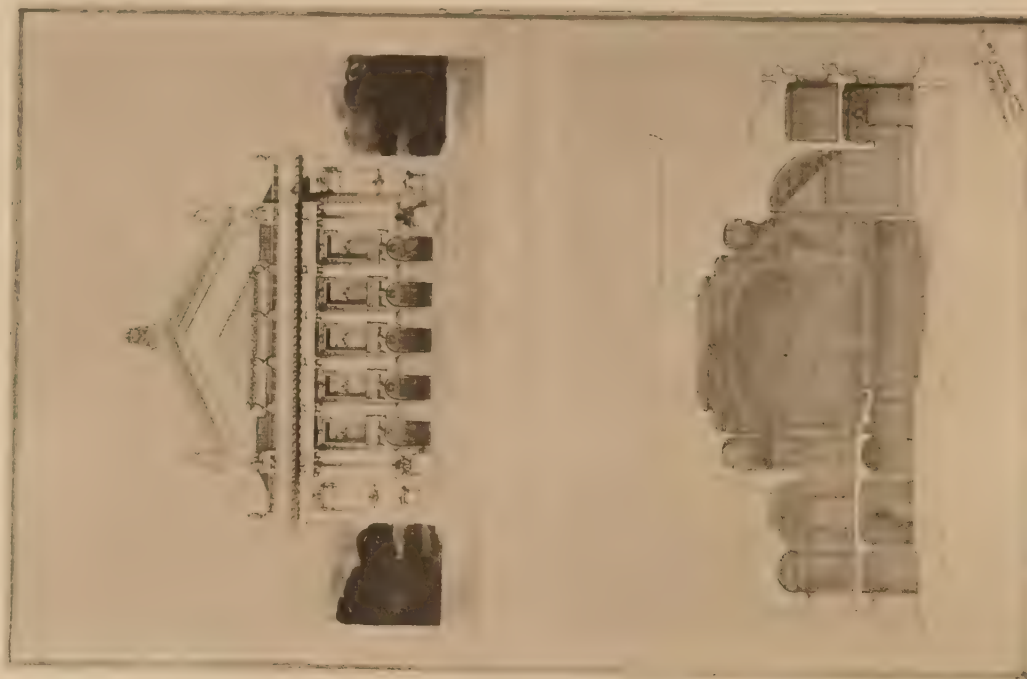
Additional copies of this program may be had by applying to the Secretary of the Association, Land Title Building, Philadelphia.



TYPICAL FLOOR PLAN, THE WYOMING APARTMENTS, SEVENTH AVE. AND 55TH ST., NEW YORK.

Rouse & Sloan, Architects.





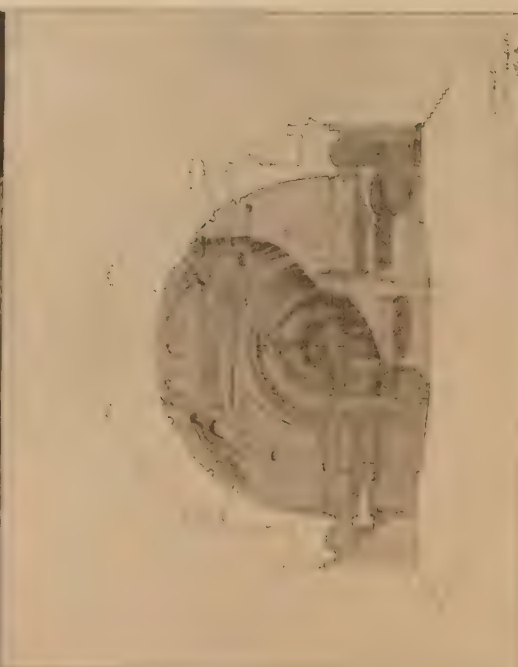
I Mention.

A. J. Reber, Atelier Carnegie.

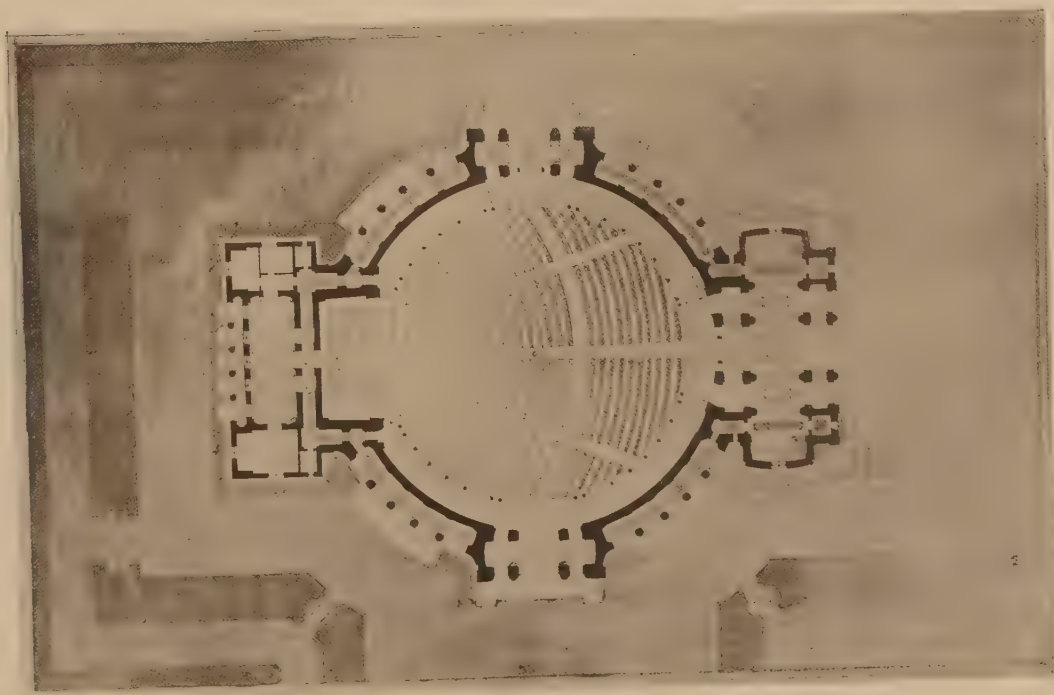


I Mention.

C. J. Prossler, Atelier Hornbostel.

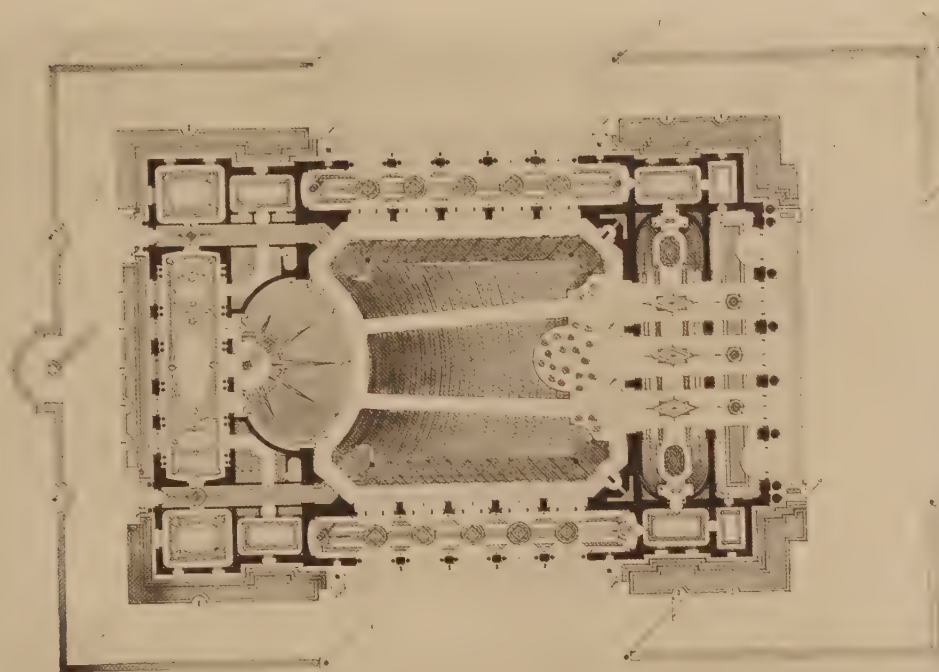






I Mention.

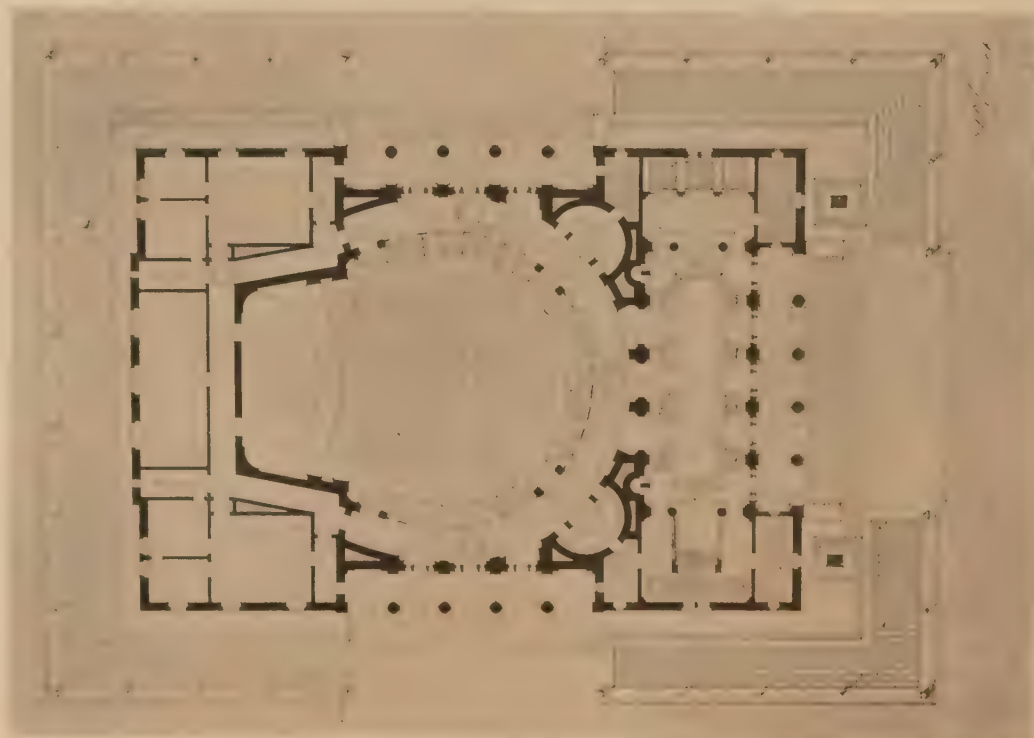
C. J. Proessler, Atelier Hornbostel.



I Mention.

A. J. Reher, Atelier Carnegie.





BEAUX ARTS COMPETITION—A CONCERT HALL.

I Mention. P. M. French. Atelier Jallade-Prevot.



## THE USE OF SCULPTURE IN ARCHITECTURE.

ONE of the most astonishing of the many astonishing generalizations of Ruskin was that Greek architecture was subordinate to and a mere vehicle for sculpture. "The Aegina pediment," he says, "vindicated the right, and settled the controversy."

It need hardly be contended, in view of the wider knowledge of Classical architecture which obtains to-day, that this statement is hopelessly at variance with the facts. But a contemplation of the sculpture on modern buildings, by which we mean buildings erected within the last five years, gives seriously to think that the opposite extreme of opinion is the besetting danger of modern architecture.

There is no doubt that figure sculpture is now being employed by architects with admirable effect, as an adjunct to their buildings, and that, as a consequence, a style of sculpture has come into existence whose essential characteristics are based upon their architectural destination. Up to a certain point this is an excellent thing, for the academic sculpture of the schools is in no way suitable for architectural purposes—indeed it is hard to say with truth that it is suitable for anything at all—while portrait sculpture, however vivid and however technically excellent it may be, has little or nothing of adaptability to architectural requirements, and it is in portrait-sculpture, as in portrait-painting, that most of the artistic energy of the present day is expended.

But architectural sculpture stands to-day, as it has ever stood, between the Scylla and Charybdis of incongruity on the one hand and slavish architecturalism on the other. It is an axiom of architecture that decoration should be appropriate, and it is also, unfortunately, a commonplace that the criterion of appropriateness is yet to be discovered by modern architects. The refuge of the destitute sculptor seems to be, "When in doubt, play symbolism"; and it is in the employment of his symbolism that the sculptor reveals himself as either an artist or more frequently a craftsman.

## The Society of Beaux Arts Architects

INCORPORATED 1894.

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Vice-President.L. E. JALLADE,  
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3 E. 33d St.  
Chairman Committee on  
Education.

OFFICIAL ORGAN - - ARCHITECTURE.

## CLASS B—PROJET.

AN ODEON OR CONCERT HALL.

By EDWIN H. DENBY.

In ancient times the odeon was a covered edifice used for reading and rehearsing works that were to be brought out in theatres. Poets and musicians also competed therein for prizes in verse and in music, either singing or orchestral.

A building of this sort is applicable to modern times, times at least for conferences and for music in all countries where art and culture reign.

The building in question is to be situated in the centre of a large public promenade. Its main feature is the Concert Room divided into two parts: the stage with orchestra, and the part reserved for the public. Adjoining the stage

are to be the artist's foyer or tuning room for instrumental artists, two rooms for singers and one for choruses.

An exterior portico of Ionic Order is to circumscribe the building in part or in whole, serving as an outside vestibule and as refuge to pedestrians in case of rain. This portico is to open to an inner vestibule with staircase and find place also for offices, coatrooms, toilets, etc.

The Concert Hall and all other rooms are to be lit and aired through ample windows.

The biggest dimension of the building is not to exceed 160 feet.

For sketch make plan and section at  $\frac{1}{8}''=1$  ft., the elevation at twice the scale.

For the rendu drawings make plan and section at  $\frac{1}{8}''=1$  ft. elevation at 3-16''=1 ft. Make also one Detail Sheet showing fragments of the Ionic Order used, such as capital, base, cornice and other features at a 3 inch scale.

LLOYD WARREN,

Chairman Committee on Education.

## REPORT OF JUDGMENT.

Saum, F. J.	St. Louis	Atelier Washington Univ.	M
Duncan, R. C.	St. Louis	Atelier Washington Univ.	M
Steidman, A. O.	St. Louis	Atelier Washington Univ.	M
Wilson, H. A.	Philadelphia	Atelier Cret	M
Reinhardt, C. M.	New York	Atelier R. V. Gibson	M
Loomis, C. D.	New York	Atelier Corbett	M
Coggeshall, M. B.	New York	Atelier Corbett	M
McCoy, J. L.	New York	Atelier Corbett	M
Arneman, E.	New York	Atelier Hornbostel	M
Paul, H. M.	New York	Atelier Hornbostel	M
Barry, F.	New York	Atelier Hornbostel	1st M
Proessler, C. J.	New York	Atelier Hornbostel	1st M
Hull, E. J.	New York	Atelier Hornbostel	M
Johnck, F. N.	New York	Atelier Hornbostel	M
Klinkhardt, G. R.	New York	Atelier Hornbostel	1st M
Rothstein, J.	New York	Atelier Hornbostel	M
Puls, C. H.	New York	Atelier Hornbostel	1st M
Chrystie, E. P.	New York	Atelier J. E. Hunt	H. C.
Hopkins, J. E.	New York	Atelier Jallade-Prevot	M
French, P. M.	New York	Atelier Jallade-Prevot	1st M
Starr, H. E.	New York	Atelier Donn Barber	M
Holland, G.	New York	Atelier Donn Barber	1st M
Hartman, C. C.	New York	Atelier Donn Barber	M
Lange, J. A.	New York	Atelier Donn Barber	M
Kenyon, H. R.	New York	Atelier Donn Barber	1st M
Robling, O. J.	Pittsburg	Atelier Carnegie Tech. School	M
Liesch, P. A.	Pittsburg	Atelier Carnegie Tech. School	M
Stimson, J. G.	Pittsburg	Atelier Carnegie Tech. School	M
Reber, A. J.	Pittsburg	Atelier Carnegie Tech. School	1st M
Amberson, M. L.	Pittsburg	Atelier Carnegie Tech. School	M
Buxton, H. A.	Pittsburg	Atelier Carnegie Tech. School	M
Wagner, S. P.	Washington	Atelier George Washington Univ.	M
Simon, G. M.	Philadelphia	Atelier Cret	M

## ARCHITECT'S CONTROL OVER ARTIST AND CRAFTSMAN.

THE control of the architect over the collaborating artist should be exercised with the utmost consideration. In the case of an artist of transcendent genius, this control might result in irreparable injury to the world in reducing him to the position of mere assistant. Ideal conditions are almost impossible of realization, and to find that the highest aspirations of an artist of the first rank had been rendered abortive or only partially successful by the artificial restrictions thrown around him by the less sensitive and subtle architect would be a misfortune never to be retrieved. That the art of painting can and does lead to a higher sphere than does architecture cannot seriously be denied. That many noble works of art are partially or entirely lost to the world by the fact that they are unfortunately exhibited is certain, and wherever this is the case, it is obvious that the conditions should be changed. What artist would begin



by purchasing a frame for his picture? And yet the architect demands that he shall conform his art to whatever contortions he may see fit to introduce into a given apartment! The architectural features and decoration of an interior should lead up to and not overwhelm the painting on wall or ceiling. *Enfin il y a deux moyens.* Either confess that painting and sculpture are higher in the sphere of art than is architecture—that there is a point beyond which architecture should not go (for the reason that the same amount of effort expended in painting, sculpture, or tapestry can do a greater service to mankind)—give the artist his way, and only supply such features as will enhance the value of what he will evolve, or concede the point that his work is a mere accessory, which will inevitably tend to enslave and humiliate him, and so deprive the world of what he might have produced under happier conditions.

### BOOK REVIEWS.

**MODERN PLUMBING ILLUSTRATED.** R. M. Starbuck. 1906. Fully illustrated by fifty-five full-page plates, made expressly by the author for this work. New York: The Norman W. Henley Publishing Company. One large 8vo. volume; cloth pp. 392. Price, \$4.00.

This work is an eminently practical work, representing the best modern practice in plumbing and water supply. Naturally, the questions of drainage and sewerage occupy first place. On these questions the author has followed the requirements of the City of New York and other important cities, as well as the requirements of the United States, in all matters of drainage and sanitation.

A special feature of the work is the liberal scale drawings, which cover almost every imaginable condition likely to come before the plumber, architect or sanitary engineer.

The book represents, in a word, the latest and best modern practice, and should be in the hands of every architect, sanitary engineer and plumber who wishes to keep himself up to date on this important feature of construction.

**PRINCIPLES AND PRACTICE OF PLUMBING.** J. J. Cosgrove. 1906. Standard Sanitary Mfg. Co. Pittsburg, Pa.

The manufacturers in the building trades are making a vigorous and most creditable effort to enlighten the architects and their clients on the various subjects of building construction and equipment. The point always in view is that a broad concise knowledge of fact, cause, effect and remedy will lead to a larger demand for their products. And I think that this is quite true.

When a manufacturer becomes a publisher he becomes the mark for much criticism and questioning which condition necessitates that the statement of such publications shall have the backing of the best authority. The general excellence of this book will commend it to many readers.

"In preparing the manuscript, the author's sole object has been to systematize and reduce to an exact basis, the principles that underlie the practice of plumbing. The necessity for accurate rules and formulas, instead of the empirical methods formerly employed, was often and forcibly brought home to the author when designing plumbing installations for large buildings. The scarcity of scientific information on this important branch of sanitation was quite marked. No book had ever been published that indicated the best kind of material to use for a given purpose, that told how work should be designed and installed to be perfectly sanitary, and that showed how to proportion the various parts with relation to the whole, so that a plumbing system designed and installed according to the text would give perfect satisfaction."

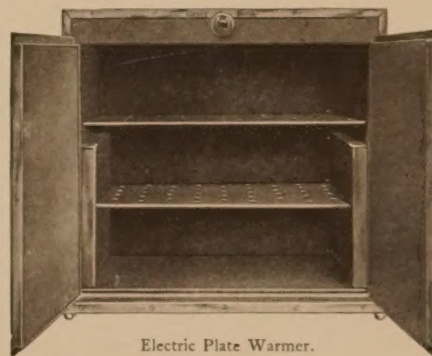
### ELECTRICAL APPARATUS FOR COOKING AND HEATING.

**H**OUSEHOLDERS of late have become aware of the fact that the electric current may be employed to the greatest possible advantage, not only for light and power, but also for the production of heat. Electric Heating De-

vices, which, but a short time since, were considered mere novelties, and, by some probably luxuries, are now conceded to be necessities.

Cooking and heating by electricity offers advantages over methods necessitating the employment of fuels, which are almost too obvious to need explanation. Electric Apparatus is always ready for use wherever the electric current is available. Neither the atmosphere nor the food which is being prepared are vitiated or tainted with the odor of burning fuel and the products of combustion, and Electric Apparatus is not only clean, but also eminently safe. As there is no flame, there is neither smoke nor soot, and dangers from fires or explosions, or from the storage of fuel, are entirely avoided. It is justly claimed that the heat in Electric Apparatus is more thoroughly localized than is possible in utensils heated by other means. For this reason greater economy may be claimed for Electric Heating Devices, apart from the consideration of their convenience. In fact, the great utility and convenience, as well as the economic value of Electric Heating Devices, are now no longer doubted by any one.

Statistics show that there has been an enormous increase during the past few years in the use of electric lighting or power current for Cooking and Heating Apparatus. The cost of operating electric heating devices is no longer prohibitive, and, properly used, such devices are economical to operate, because heat need be applied and current consumed only during the actual operation of cooking and heating, and not before and after.



Electric Plate Warmer.

Of particular interest to Architects are the Electric Plate Warmers, many of which have recently been installed in private residences, hotels, restaurants and public institutions. These devices, which do not differ in appearance from Plate Warmers or hot closets heated by gas or steam, have been brought to a point of perfection, which makes them worthy of serious consideration by the progressive Architect. All modern buildings are now wired for electricity, and the Electric Plate Warmer should be welcomed by all householders on account of its convenience, safety and cleanliness.

One of these devices recently introduced in a number of New York residences is equipped in a unique manner. The electric heating equipment consists of a number of resistances, the construction of which differs considerably from the wire resistances, imbedded in enamel or other compositions, heretofore mostly employed for the production of electric heat.

The resistances employed in this new type of apparatus are strips of mica carrying a thin layer of precious metal



firmly secured to the mica by a process of firing. The conducting strip of mica is protected by another piece of mica, which acts as a cover, and the whole is encased in a metallic casing. These resistances or heating units, therefore, are small strips of the thickness of cardboard only, occupying but very little space. A number of these resistances or heating units are placed on racks where they are simply fastened by being slipped under chips. The racks in turn are fastened to the inside shell of the Plate Warmer and are masked with sheet iron flues. This very simple mode of equipment takes hardly any room and certainly much less space than has to be allowed for pipes in gas or steam heated Plate Warmers. It is possible to replace these resistances at any time without, in any way, disturbing the apparatus or the wiring, and, in fact, without the use of tools. Mica resistances, as above described, are very durable and will last an indefinite length of time.

In private residences, as well as in hotels and restaurants, the serving room or pantry, is frequently in close proximity to the dining room. The pantry being the logical location for a Plate Warmer, the advantages of an Electric Apparatus which does not raise the temperature of the room where it is kept or vitiate the atmosphere, becomes quite apparent. It is frequently desirable to have a Plate Warmer or Warming Closet in public institutions, such as hospitals, etc., in the room where meals are served, and an Electric Apparatus should prove ideal for that purpose. The cost of operating these Electric Plate Warmers is no more than the cost of fuel for gas or steam heated appliances, and they are certainly more simple and safer to operate than devices requiring fuel, piping, and expensive installations.

Architects design and execute many buildings, the interiors of which demand a gloss surface for woodwork. The Chicago Varnish Company's line of gloss and semi-gloss finishes hold an established position and meet all requirements. There are no better varnishes made, and

through their use many effects may be gained which otherwise would be quite unattainable.

Supreme Wall Enamel as a finish for plastered walls as well as woodwork is a material unsurpassed both from a hygienic standpoint and attractive effect. This finish is of moderate cost and not difficult of application. For hospital work, bath rooms, kitchens, etc., where white finish is desired, it is largely specified with the most satisfying results to clients and architects.

Where a gloss finish for floors is desirable Supremis is the one finish on the market which will give this result and a permanent effect that will not spot with water and will well withstand hard usage.

The beautiful ivory tone supplied by the use of White Enamelite as a finish for woodwork has met the requirements of some of the most exacting architects and is susceptible of a beautiful satinlike effect when lightly rubbed, although many prefer to use it in its full lustre. It is adapted to the finest grade of work. Chicago Varnish Company's flat lead should be used for the under coats.

Palest Crystalite Polishing Varnish gives a beautiful finish in the high gloss, or it may be rubbed with pumice and water to a dead surface. It is an absolutely pale varnish and beautifies and intensifies the grain of the wood as well as any delicate tint over which it may be applied.

Hyperion finish is also an excellent gloss varnish for the finish of the woodwork of interiors as well as furniture. It is not so costly as crystalite, it has a high lustre and rubs well.

Shipoleum needs scarcely a word of introduction; it is used for the finest interior work and furniture where clearness of color is not an essential. It is susceptible of a very high polish and for more than twenty years has held an unassailed position for use in hospitals, public buildings, bath rooms and laundries where exposure to severe usage, ammonia and constant cleaning would seem to invite early destruction.

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## THE SCHOOLS OF ORNAMENT.\*

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## Elizabethan.

Elizabeth born at Greenwich 1533, died at Richmond 1603.



HE reign of Queen Elizabeth from 1558 to 1603, followed by that of James I, was productive of a school, or rather adaptation of other schools, of ornament which, however, did not reach as high an artistic plane as did Elizabethan literature, but, nevertheless, formed a strong transitional style between Gothic and Renaissance art.

There is a great deal of flat, unmodeled, but symmetrically disposed ornament in Elizabethan woodwork. Old forms, such as the guilloche and different interlaces, and the volute and other curves are much used, connected by bands terminating in volutes and placed back to back with the frequent introduction of the boss or smaller studs.

This strap work much resembles and was influenced by that of the German and Flemish Renaissance, and many of the motives are not unlike those found in the style of Francis I, while its elaboration and richness suggest the indirect influence of Oriental ornament.



Mantel, Wroxall Hall.



Iron Tankard.



Plaster Frieze, Little Charlton.

\* A series of articles written by Mr. William Winthrop Kent, Architect, forming part of "A Treatise on Locks and Builders' Hardware," by Henry R. Towne, President of the Yale & Towne Mfg. Co., and Past President of the American Society of Mechanical Engineers. This book is profusely illustrated and contains more than 1100 pages, 4x6 1/2". John Wiley & Sons, Publishers. Price, \$1.00. It is the intention of the publishers of ARCHITECTURE to reprint one school in each number.



Hall and Chamber, Stockton House, Wiltshire.

after the death of James I, through whose reign it lasted, without leaving any material impression upon succeeding work, although to-day we, in America, are seeing its revival in a very healthy and constantly growing fondness for the Elizabethan country house.

Toward the close of the reign of Queen Elizabeth the stiffness and formality of style produced by the preceding Gothic had settled into the school distinctively known as Elizabethan, but it can scarcely be considered as more than a transitional stage and soon after the death of James I, English ornament, as expressed decidedly in Jacobean work, felt more strongly the powerful influence of the Italian Renaissance as the works of Inigo Jones and Sir Christopher Wren plainly indicate.



The Circular Dining Room, Longford Castle, Wiltshire.